performing speech recognition on an utterance to produce a recognition result for that utterance, identifying a correction command in the recognition result for that utterance, and identifying corrected text from a portion of the recognition result for that utterance. The correction command indicates that the portion of the recognition result from which corrected text is identified comprises a pronunciation of a word to be corrected.

Claims 1-6 and 12 stand rejected as being anticipated by Gould et al. (US Patent No. 5,428,707). Gould describes a system that detects an utterance and determines whether a best scoring word for the utterance is a command. Commands include choice commands (CHOOSE-N) and delete commands (CHOOSE-10, SCRATCH THAT), and the buffer command (OOPS). See Gould's Fig. 5. If the best scoring word is not a command, then the best scoring word is entered into an OOPS buffer, typed into a word processing program, and displayed as the best scoring word in a choice list along with other high scoring words. See Gould at Figs. 5 and 40-62 and col. 8, lines 41-65.

The choice commands, CHOOSE-N (e.g., CHOOSE-1, CHOOSE-2), enable a user to select a word other than the best-scoring word from the choice list if the best scoring word is not correct. See Gould at Figs. 5 and 40-62 and col. 8, line 66 - col. 9, line 17. Though the "N" portion of Gould's "CHOOSE-N" command could arguably be said to identify corrected text, it can in no way be

said to comprise a pronunciation of a word to be corrected. "CHOOSE-N" is used to pick the "N"th word from the choice list, it does not provide a pronunciation of corrected text. For example, "CHOOSE-3" selects the third word from the list.

The delete commands, CHOOSE-10 and SCRATCH THAT, indicate that none of the words in the choice list are correct. See Gould at col. 12, lines 55-60. The delete commands erase the best scoring word from the word processing program, remove the choice list from the display, and cause the system to wait for the next utterance. See Gould at Fig. 5 and col. 12, line 60 - col. 13, line 3. The delete commands do not identify corrected text, on the contrary, they delete incorrect text. Furthermore, neither delete command indicates that a portion of the recognition result for the command comprises a pronunciation of a word to be corrected.

The OOPS command allows a user to enter the OOPS buffer which stores the twelve most-recently recognized words. See Gould at col. 13, lines 4-30. Any further correction would require the use of additional commands, including the choice commands and the delete commands. See Gould at col. 13, line 30 - col. 14, line 13. The OOPS command neither identifies corrected text from a portion of the recognition result nor indicates that a portion of the recognition result comprises a pronunciation.

The Examiner points to Gould's Confirmed Training Only
Routine as somehow indicating that a portion of a recognition
result for a command comprises a pronunciation of a word to be
corrected. This is not understood.

If the best-scoring word is not a command, then Gould's
system continues to simulate typing of the utterance's best
scoring word. See Gould's Fig. 5. The system then tests to see
if a Confirmed Training Only Flag is false or if a Confirmed Flag
is set. See Gould at col. 14, lines 14-19. The Confirmed Flag
is used to indicate whether the user has specifically confirmed
the first choice word in the oldest entry of the OOPS buffer.
See Gould at col. 9, lines 47-51 and col. 14, lines 30-33. The
Confirmed Training Only Flag indicates whether all utterances are
to be used for training. For example, a Confirmed Training Only
Flag of "false" indicates that the user wants all normal
utterances to be used for training, i.e. the user does not need
to confirm training of an utterance since it should happen
automatically. See Gould at col. 14, lines 33-35. Therefore,
the Confirmed Training Only Flag and the Confirmed Flag are not
correction commands and they fail to indicate that a portion of
the recognition result comprises a pronunciation of a word to be
corrected.

For these reasons, Applicants submit that Gould in no way
describes or suggests the subject matter of claim 1. Claims 2-6
and 12 depend from claim 1 and are allowable for the reasons set

forth above, and for containing allowable subject matter in their own right. Accordingly, Applicants request withdrawal of the rejection of claims 1-6 and 12.

Claims 8-11 and 13-24, all of which depend from claim 1, stand rejected as being obvious over Gould in view of Roberts et al. (US Patent No. 5,027,406). As shown above, Gould fails to describe or suggest the combination of features of claim 1. Roberts, however, fails to cure the deficiencies of Gould. As was discussed in the interview granted on 1/14/99 and as was conceded by the Examiner, the correction commands ("start_comletter" and "backspace") of Roberts do not comprise a pronunciation of a word to be corrected, as recited in claim 1. Therefore, since both Gould and Roberts lack this feature, any possible combination of Gould and Roberts would fail to describe or suggest the combination of features of claim 1. For this reason, Applicants request withdrawal of the rejection of claims 8-11 and 13-24.

Independent claim 25 recites a method for recognizing a spelling of a word in speech recognition. The method includes performing speech recognition on an utterance to produce recognition results for that utterance and identifying a spelling command in the recognition result. The spelling command indicates that a portion of the utterance comprises a spelling. The method further includes producing the spelling by searching a dictionary using the recognition results and using confused

spelling matching.   In confused spelling matching, commonly-
confused letters are treated as a single letter to identify the
spelling corresponding to the portion of the utterance.

Claims 25 and 27-30 stand rejected as being obvious over
Roberts et al. in view of Junqua (US Patent No. 5,677,990).
Roberts relates to a speech recognition system that permits a
user to enter letter commands, "starts_comletter", where
"comletter" corresponds to a letter from a communications
alphabet (alpha, beta, etc.). See Roberts at col. 19, line 46 -
col. 20, line 19. The purpose of using the communications
alphabet, as opposed to a letter alphabet (a, b, etc.) is to
avoid pronunciation confusion between letters. Furthermore, when
using the letter commands, the recognition vocabulary excludes
words which are the same as or may be confused with the
communications alphabet. For example, the word "alpha" and any
word that may be confused with "alpha", like "elfin" are excluded
from this vocabulary. See Roberts at col. 20, lines 12-19.
Thus, Roberts fails to describe or suggest using confused
spelling matching to identify the spelling corresponding to the
portion of the utterance. Moreover, for the reasons noted above
(e.g., Roberts use of a specialized communications alphabet),
there would have been no reason to employ confused spelling
matching in Roberts' system.

Junqua relates to a spelling recognition strategy that uses
a hidden Markov model recognizor and, if needed, a neural network

discriminator, to distinguish between confusable letters. <u>See</u>
Junqua at col. 6, line 25 - col. 7, line 10. However, as Junqua
points out, if a special phonetic alphabet is used (such as the
communications alphabet of Roberts), spelling recognition
accuracy is greatly improved; "speech recognition of continuously
spelled names is...more difficult than the more general task of
continuous speech recognition. Recognition of spoken letters is
even difficult for humans....This is why radio operators are
trained to use a phonetic alphabet, A-Alpha, B-Baker, C-Charlie,
etc., when communicating over a noisy channel." <u>See</u> Junqua at
col. 1, lines 41-50. With this improved recognition accuracy,
provided by the phonetic alphabet, there is no need for confused
spelling matching. Accordingly, one of ordinary skill in the art
would have had no motivation to combine Roberts and Junqua in the
manner suggested by the Examiner.

Claims 27-30 depend from claim 25 and are allowable for the
reasons set forth above, and for containing allowable subject
matter in their own right. For these reasons, Applicants request
withdrawal of the rejection of claims 25 and 27-30.

New claim 31 depends from claim 25 and is allowable for at
least the reasons set forth above.

Please charge any additional fees, or make any credits, to Deposit Account No. 06-1050.

Respectfully submitted,

Date: March 10, 1999

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